

IN THE CLAIMS:

1. (Previously Presented) A fluid coupling assembly for retaining a sealed joint,
5 comprising:

a first member adapted to be connected to a first fluid conduit and having a first
sealing surface, a radially projecting series of serrations and a first fastening configuration; and

a second member adapted to be connected to a second fluid conduit, a second
fastening configuration and enabling a second sealing surface to engage the first sealing surface,

10 the second member has a plurality of annularly spaced axially cantilevered beams,
each beam having at least one tooth of a configuration to engage the series of serrations, an
operative engagement of the tooth and serrations enables a relative low force rotation during a
sealing engagement of the first sealing surface and the second sealing surface and a relatively
higher force resistance to rotation during disengagement the axially spaced cantilevered beams
15 are spaced to position respective distal ends of the cantilevered beams to enable a visual
conformation of engagement of an alignment of a tooth and the annular serrations between the
spacing of the cantilevered beams.

2. (Original) The fluid coupling assembly of Claim 1 wherein each cantilevered
beam has a curvilinear cross section traverse to an axial direction.

3. (Original) The fluid coupling assembly of Claim 2 wherein the cantilevered
beams are spaced in an annular pattern with a pair of teeth provided at an axially distal side end
of each cantilevered beam.

4. (Original) The fluid coupling assembly of Claim 1 wherein the serrations are annularly arranged in a circular pattern about the first member and the axially cantilevered beams have inner and outer diameters that subscribe concentric circles and at least one tooth member on each cantilevered beam projects radially inward from each cantilevered beam inner diameter to
5 engage the circular serrations in a ratcheting manner as the respective teeth undulate over the circular serrations during sealing engagement and disengagement modes of operation.

5. (Original) The fluid coupling assembly of Claim 4 wherein a pair of spaced teeth project radially inward from each cantilevered beam.

6. (Original) The fluid coupling assembly of Claim 4 wherein the circular serrations are formed by truncated teeth with annular axially tapered surfaces and transverse engagement surfaces of different angular dimensions.

7. (Original) The fluid coupling assembly of Claim 4 wherein the cantilevered beam teeth and the circular serrations have the angular dimensions for the engagement surfaces wherein an equal resistance force is provided for both coupling and de-coupling.

8. (Original) The fluid coupling assembly of Claim 7 wherein 3 spaced teeth project radially inward from each cantilevered beam.

9. (Original) The fluid coupling assembly of Claim 1 wherein axial leading surfaces of the serration are chamfered.

10. (Original) The fluid coupling assembly of Claim 1 wherein the location of the tooth and the serrations are to align at their axially leading transverse surfaces when the first member and second member are operatively coupled.

11. (Previously Presented) A fluid coupling assembly for retaining a sealed joint, comprising:

a first member adapted to be connected to a first fluid conduit and having a first sealing surface, a series of serrations and a first fastening configuration; and

5 a second member adapted to be connected to a second fluid conduit, a second fastening configuration and enabling a second sealing surface to engage the first sealing surface,

the second member has a plurality of axially cantilevered beams, each beam having a plurality of teeth of a configuration to engage the series of serrations and spaced offset from an axis of the first and second fluid conduit wherever the initial and final operative
10 engaging contact of the teeth and serrations is directly between an entrance of the teeth into the serrations and axially aligned surfaces of the serrations, an operative engagement of the teeth and serrations enables a resistance force rotation during a sealing engagement of the first sealing surface and the second sealing surface and a resistance force rotation during disengagement, the plurality of teeth and serrations remaining in contact with each other when a pre-determined
15 sealing force is reached between the first member and the second member.

12. (Original) The fluid coupling assembly of Claim 11 wherein each cantilevered beam has a curvilinear cross section traverse to an axial direction.

13. (Original) The fluid coupling assembly of Claim 12 wherein the cantilevered beams are spaced in an annular pattern with a plurality of teeth provided at an axially distal side end of each cantilevered beam.

14. (Original) The fluid coupling assembly of Claim 13 wherein the serrations are annularly arranged in a circular pattern about the first member and the axially cantilevered beams have inner and outer diameters that subscribe concentric circles and each tooth member on each cantilevered beam projects radially inward from each cantilevered beam inner diameter to
5 engage the circular serrations in a ratcheting manner as the respective teeth undulate over the circular serrations during sealing engagement and disengagement modes of operation.

15. (Original) The fluid coupling assembly of Claim 14 wherein the resistance force is the same during the sealing engagement and sealing disengagement.

16. (Previously Presented) A fluid coupling assembly for retaining a sealed joint, comprising:

a first member adapted to be connected to a first fluid conduit and having a first sealing surface, a series of axially aligned raised serrations and a first fastening configuration;

5 and

a second member adapted to be connected to a second fluid conduit, a second fastening configuration and enabling a second sealing surface to engage the first sealing surface,

the second member includes a hollow cylindrical collar with spaced axial notches forming a plurality of axially cantilevered beams, wherein each cantilevered beam has a
10 curvilinear cross section traverse to an axial direction, each beam having a plurality of teeth of a

configuration to engage the series of serrations, an operative engagement of the teeth and serrations enables a resistance force rotation during a sealing engagement of the first sealing surface and the second sealing surface and a resistance force rotation during disengagement, the plurality of teeth and serrations remaining in contact with each other when a pre-determined
15 sealing force is reached between the first member and the second member.

17. (Original) The fluid coupling assembly of Claim 16 wherein one of the serrations and teeth have transverse engagement surfaces of different angular dimensions during a sealing engagement and disengagement to provide a lower force during engagement and a higher force during engagement.

18. (Previously Presented) The fluid coupling of Claim 16 wherein the axially aligned serrations are annularly arranged in a circular pattern about the first member and the axially cantilevered beams have inner and outer diameters that subscribe concentric circles and each tooth member on each cantilevered beam projects radially inward from each cantilevered
5 beam inner diameter to engage the circular serrations in a ratcheting manner as the respective teeth undulate over the circular serrations during sealing engagement and disengagement modes of operation whereas the cylindrical collar contacts the first member only when the respective tooth members and circular serrations engage in an initial and final engaging contact directly between an entrance to the serrations and a surface of the axially aligned raised serrations.

19. (New) An integral two piece fluid coupling assembly for retaining a sealed joint between a pair of fluid conduits comprising:

a first member having a central fluid passageway adapted to be connected to a first fluid conduit and having an integral first sealing surface at one end, an integral outwardly projecting series of serrations in a circular pattern, and an integral outwardly projecting first fastening configuration; and

a second member having a central fluid passageway adapted to be connected to a second fluid conduit, an integral second fastening configuration for enabling a second sealing surface to engage the first sealing surface, the second member has an integral outer cylindrical surface extending over the second fastening configuration with a plurality of spaced cantilevered beams integrally extending from the cylindrical surface and configured to operatively extend over the series of serrations when the first sealing surface engages the second sealing surfaces,

wherein each cantilevered beam has an inner and an outer diameter that subscribes concentric circles and a plurality of teeth of a configuration to engage the series of serrations and spaced offset from an axis of the first and second fluid conduit wherever the initial and final operative engaging contact of the teeth and the series of serrations is directly between an entrance of the teeth into the serrations and axially aligned surfaces of the series of serrations, and a visual confirmation of an engagement contact of the teeth and series of serrations is provided in the spacing between the cantilevered beams, while an audio and tactile confirmation of engagement contact of the teeth and the series of serrations is provided in the ratcheting manner as the plurality of teeth undulate over the circular pattern of the series of serrations during a sealing engagement and a disengagement mode of operation.

20. (New) The integral two piece fluid coupling assembly of Claim 19 wherein
respective contact surfaces of the series of serration pattern and the plurality of teeth on each
cantilevered beam enables a lower resistance force rotation during a sealing engagement of the
first sealing surface and the second sealing surface and a higher resistance force rotation during
5 disengagement, the plurality of teeth and the series of serrations remaining in contact with each
other when a pre-determined sealing force is reached between the first member and the second
member.